

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: April 28, 1976

Forwarded to:

Honorable Asaph H. Hall
Administrator
Federal Railroad Administration
Washington, D.C. 20590

SAFETY RECOMMENDATION(S)

R-76-15

On February 4, 1976, two opposing Penn Central Transportation Company freight trains, BM-7 and NY-12, collided near Pettisville, Ohio, resulting in the deaths of four crewmembers and the injury of two other crewmembers. ^{1/} The accident occurred on track No. 2 of the double-track main line system located between Toledo, Ohio, and Elkhart, Indiana, where trains are operated in either direction by signals of a traffic-control system. Crossovers between the two main tracks are provided at strategic points to permit trains to be crossed over from one track to the other.

Westbound train BM-7, consisting of 4 locomotive units and 112 cars, was to be routed from track No. 2 to track No. 1 at crossover No. 327 in order to permit eastbound train NY-12 to pass by on track No. 2. The crossover had been lined and the route had been established for the westward movement of BM-7; this automatically caused the signal governing eastward movements on track No. 2 at control point 327 to display a "Stop" aspect.

Train NY-12, consisting of 3 locomotive units and 73 cars, approached the eastward signal at control point 327 at an estimated speed of 35 mph. It passed the "Stop" signal without reducing its speed, ran through and damaged the switch which had been lined for the crossover movement, and continued eastward about 1 mile, where it collided with train BM-7.

^{1/} The National Transportation Safety Board will issue a full report on this accident in the near future.

When train NY-12 ran through the switch at control point 327, it bent the switch's operating rods; this caused the switch points to gap open about 3/4 inch. The open points, however, did not actuate the switch detector circuit, which would have caused the signal to display a "Stop" aspect. A portion of the switch point opposite the one that the locomotive wheel trailed through was broken. This permitted the wheel to move behind the broken point and prevented that point from moving. The detector rod was connected only to the point which did not move, while the opened point was not connected to any detection circuit.

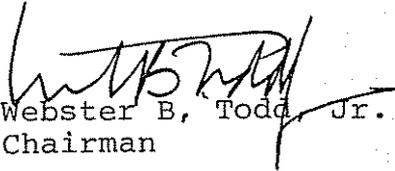
After NY-12 had moved eastward beyond the limits of control point 327 and the controlling block on track No. 1 was cleared, the signal governing westward movements on track No. 2 at control point 327 displayed a proceed aspect and continued to do so following the accident.

According to 49 CFR 236.205, a signal which governs train movements into a block must display its most restrictive aspect when the points of a switch are not closed in their proper positions. Although the points of the switch were not closed in the proper positions after they were damaged, the signal did not display its most restrictive aspect. This does not appear to satisfy the intent of the regulation, which was designed to protect train movements against switches whose points do not close properly.

This occurrence raises the question of whether switch point detectors at other locations are connected in a similar manner. Therefore, the National Transportation Safety Board recommends that the Federal Railroad Administration:

Insure that switches in signal territory are so protected that related signals governing train movements will display their most restrictive aspects if the switch points do not close properly. (R-76-15) (Class I, Urgent Followup)

TODD, Chairman, McADAMS, THAYER, BURGESS, and HALEY, Members, concurred in the above recommendation.


By: Webster B. Todd, Jr.
Chairman